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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,558	11/07/2003	Tryggvi Emilsson	ADV08 795	9569

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EXAMINER

GUHARAY, KARABI

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2879

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Please find below and/or attached an Office communication concerning this application or proceeding.

EC

Office Action Summary	Application No. 10/702,558	Applicant(s) EMILSSON, TRYGGVI	
	Examiner Karabi Guharay	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Argument, filed on 7/25/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-35, 37-41 and 48-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 48-51 is/are allowed.
- 6) ☒ Claim(s) 13, 14, 17, 19-24, 26-35, 39-41, 52 and 53 is/are rejected.
- 7) ☒ Claim(s) 15, 16, 18, 25, 37 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's arguments, filed on 7/25/05 has been considered and entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 recites the limitation "the step of introducing silica powder" in line 2.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Lenney et al. (US 5881645).

Regarding claim 29, Lenney et al. disclose a method of applying a silica coating to a metallic foil comprising a step of introducing silica powder to the plume of an argon torch (lines 7-12 of column 2, and lines 1-4 of column 4) and passing the foil through the plume.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 30, 35, 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss (US 4749902) in view of Sekhar et al. (US 6455107) further in view of Sullivan (US 3867166).

Regarding claims 13, 30, 35 & 52-53, Weiss discloses a method of coating a metallic foil with a corrosion-protection film (lines 60 of column 1- line 36 of column 2), comprising the steps of applying a suspension of silica and then drying (thus adhering) to at least a portion of a metallic foil (lines 19-28 of column 3) exposing the silica containing metal foil assembly to a high temperature (see lines 30-38 of column 3), and attaching an electrical lead (4) to the foil (Fig 1, lines 23-24 of column 3).

But Weiss does not specifically disclose that the particular suspension of silica particles is a colloidal suspension.

However, Sekhar et al. disclose a method of making a corrosion resistance coating using colloidal slurry containing silica (lines 58-59 of column 3) and teaches that this type of coating is highly corrosion resistant and applying the coating and drying and exposing to high temperature.

Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to use colloidal silica, which is very effective in producing corrosion resistance coating on an article.

But both Weiss and Sekhar et al. do not disclose that the coated metal foil is exposed to a fusion temperature to effect fusion of silica particles to form a silica film on the foil.

However, Sullivan teaches a method of applying a corrosion resistance layer containing silica on the metal surface where after drying the coating, the coated article is exposed to a fusion temperature to effect fusion of silica particle to form silica film on the foil, and further teaches that such method of coating produces high corrosion resistance coating which has high adhesion to base metal (lines 24-40 of column 4). Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to heat the coated metal foil to heat up to a fusion temperature to fuse the silica particles on the metal surface since this will produce a stronger bonding of the layer to the metal base.

Regarding claim 14, Sekhar et al., disclose a method of dipping into the bath comprising colloidal silica (lines 47-49 of column 2).

Regarding claim 17, Sekhar et al. discloses that the bath comprises silica and an organic solvent (lines 58 of column 3-line 2 of column 4) but does not specifically mention organic solvent being methanol, however, selection of a known material for the suitable purpose is considered to be within the skill of art.

Regarding claims 19, & 20, Sekhar et al. disclose that the colloidal silica further comprises an organic binder (lines 1-2 of column 4), such as polyimides (see lines 29-35 of column 6).

Regarding claims 21. & 26, Weiss discloses that the foil comprises molybdenum (line 20 of column 1).

Regarding claims 22-24, Sullivan discloses that the fusion temperature is in the range of 1400-1700°F (line 24-25 of Col. 4). The same reason for combining art as in claim 13 applies.

Regarding claim 27, Sekhar et al. disclose that the silica colloid is adhered by spray coating, rolling, brushing or misting (lines 46-48 of column 2).

Regarding claim 28, Sekhar et al. disclose that the colloid is exposed to plasma or laser (lines 3-6 of column 4).

Regarding claim 31, Weiss discloses a second electrical lead (8) attached to the other end of the foil (6).

Regarding claims 33 & 34, Weiss discloses that the electrical lead forms an electrode for a high intensity discharge lamp such as halogen lamp (lines 47-48 of column 2).

Regarding claim 35, Sekhar et al. disclose a method of exposing an article to a predetermined temperature for a predetermined time comprising the steps of providing a heat source elevating the temperature of the source to a predetermined value then and passing the article for fusion of silica particles through the heat source at a rate to

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effect the exposure at a predetermined temperature for a predetermined time (lines 3-10 of column 4).

Regarding claim 39, Sekhar et al. disclose that the exposure is conducted in an inert atmosphere (lines 17-19 of column 8).

Regarding claim 40, Sekhar et al. disclose that the heat source is selected from the group consisting of a conductor, induction coil, a furnace, inert gas plasma and a laser (lines 2-11 of column 4).

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss and Sekhar et al. as applied to claim 30 above, and further in view of Miyoshi et al. (US 4613301).

Regarding claim 41, combined structure of Weiss and Sekhar et al. disclose a conductor for a heat source but does not mention a coiled tantalum wire as the heater, however, Miyoshi et al. disclose that tantalum coils are suitable as ignition heater coil (lines 67 of column 3-line 2 of column 4).

Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to use coiled tantalum as a heat source in the device of Sekhar et al. for its suitability as a heating coil as disclosed by Miyoshi et al.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss, Sekhar et al. and Sullivan, as applied to claim 30 above, and further in view of Hull et al. (US 5269810).

Regarding claim 32, the combined method of Weiss & Sekhar et al. meets all the limitations of claim 32 except for the limitation of attachment of foil by crimping a portion of the foil around the lead.

Weiss simply discloses that the leads are attached to the foil but does not disclose the method of attaching.

However, Hull et al. disclose that crimping of the metal foil against the lead is a convention method of attaching (lines 66 of column 4-lines 2 of column 5).

Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the method of crimping since this is a well known process of attaching metal foil to the lead wire in the art of light bulb.

Allowable Subject Matter

Claims 48-51 are allowed over the prior art of record.

Claims 15-16, 18, 25, 37-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 15, 16, & 48-51, the prior art of record neither shows nor suggests a method including all the claimed limitations of above claims, particularly the limitation of foil is withdrawn from the bath at a rate of about 1mm/sec to about 100 mm/sec.

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Regarding claim 18, prior art of record neither shows nor suggests a combination of limitations set forth in claim 18, particularly comprising the limitation of applying a voltage to the metallic foil concurrent with immersion and withdrawal of at least a portion of the foil in the bath.

Regarding claims 25, 37, 38, prior art of record neither shows nor suggests a method including all the limitations of claims 25, 37, 38, particularly the limitation of predetermined time is about one-half second.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is (571) 272-2452. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Guharay
Karabi Guharay
Primary Examiner
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